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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,508	12/12/2003	Masakatsu Endo	NGBCP003	1008

25920 7590 11/25/2008

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EXAMINER	
DICKERSON, CHAD S	

ART UNIT	PAPER NUMBER
2625	

MAIL DATE	DELIVERY MODE
11/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,508	ENDO ET AL.	
	Examiner	Art Unit	
	CHAD DICKERSON	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 10-12, 17-20 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,10-12,17-20 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/29/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 10-12, 17-20 and 27 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims has necessitated the new ground(s) of rejection. However, the references of Smart and Kuwata '833 are still applied to the claims. The reference of Okuda is still applied to the claims 11 and 12 below. The reference of Fukasawa '952 is still applied to cover the claim feature presented in claim 27. In the arguments, the Applicant traverses the rejection on the basis that the two references of Smart and Kuwata were not obvious to combine in order to meet the claim limitations. Since both inventions are concerned with different problems, the Applicant asserted that there would be no reason to combine the two references. The Examiner respectfully disagrees with this assertion. When looking at both of the references, both are concerned with processing an image that is to be sent from a camera to a printer. Both systems involve communication with

a printing device either through an intermediate device or directly with the printer. When looking at the device of Kuwata, the invention contains image information being sent from a camera to the printer through a computer or directly to a printer (sees Kuwata paragraphs [0081]-[0085]). This is similar to the invention of Smart since the Smart reference uses a camera to communicate through a computer system (shown in figure 21) to a printer (see paragraphs [0040]-[0044]). Since both inventions are in the same filed of endeavor, the Examiner deems the combination of the two references appropriate and maintains the rejection below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 10 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smart '691 (US Pub No 2003/0208691) in view of Kuwata '833 (US Pub No 2002/0030833).

Re claim 1: Smart '691 discloses a direct printing method, comprising steps of:

connecting a digital camera storing an image data file and a printer operable to perform a print operation (i.e. the camera is used to record and store visual images as image data information, or a file in a certain format (i.e. JPEG), and the printer is used

to operate a printing function on the transmitted image data; see paragraphs [0041], [0046]);

confirming whether an extended function in a predetermined print control protocol is executable in both of the digital camera and the printer (i.e. in the system of Smart '691, the camera (102) desires an output in a format that is different than the format of the printer (104) which accepts the request. The camera has the ability to request a certain function (i.e. format transformation) to occur to image data for a predetermined function (i.e. printing image data) in the system. The system does establish, or confirm, whether an extended function, such as format transformation, for the printing function, which is considered as a predetermined function, is a valid, or executable, request for the camera, considered as the image supply device, and whether the function is actually present, which is analogous to being valid or executable, in the printer, which is considered to be the image output device. Illustrated in figure 10, when a suitable target device is found, it is checked to see if profile compatibility is found between the profile of the camera and the target device. If there is not a profile compatibility, an extension function, which is gained through another device that serves a mediator that performs the extended function for the predetermined function of printing a document, is acquired through the discovery of the other devices on the network and confirms that the device that offers the extended function for the predetermined function of printing, is available for use by the image output device; see figs. 10 and 20; paragraphs [0124]-[0165]);

generating a control information item including a script which is described by a markup language while inserting an extension tag corresponding to the extended function into the script, in a case where it is confirmed the extended function is executable (i.e. when it is confirmed that an extended function is available for the printer to use, which is performed by the discovery and/or announcement process, to process and output an image, a control information item is generated that includes a script for image processing which is described by XML, which is a markup language. For example, if the camera and the printer realize that an output formation of the camera is able to be performed as the input format of the printer, which the format is considered as the extended feature, then a script {9} is generated and this script includes the feature asked for by the camera. Using example 4, the same situation can occur if the user wants to print in high resolution and the printer has the capability of doing so. In this case, the script {9} would represent a tag communicating to the camera that the printer is capable of printing in high resolution; see figs. 10 and 20; paragraphs [0117]-[0120] and [0124]-[0165]);

generating a control information item including a script which is described by a markup language without inserting an extension tag corresponding to the extended function into the script, in a case where it is confirmed the extended function is not executable (i.e. in the system of Smart, when the camera queries the printer to see if the printer matches the features of the camera and a mismatch takes place, the printer is not used to insert the extended feature inside a developed script and send it to a camera as in script {9}. This is an example of the printer not inserting a tag into a script

and sending this to the camera to confirm the extended feature. Instead, the printer sees if any intermediate devices can perform this feature. If a codec is found to perform the feature, the codec is used to perform the extended feature and the result is passed to the printer for printing. This is shown in example 4. In example 5, in paragraph [0142], the computer discovers the printer does not perform all the features it needs and then another script is developed and sent to an intermediate device without the printer inserting any tag in the script since it cannot perform the needed feature for job processing; see paragraphs [0124]-[0165]);

communicating, between the digital camera and printer, the control information item (i.e. the information that is used to control the printer and give the attributes of a user's request is in lines 4, 5 and 6 of code fragment {8}. The communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2; see figs. 1, 2 10 and 20; paragraphs [0124]-[0165]),

transmitting, from the digital camera to the printer, an image data file described in the script (i.e. the information that is used to control the printer and give the attributes of a user's request is in lines 4, 5 and 6 of code fragment {8}. The communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2. Since the system operates using the XML schema in communicating requests, the transmission from the camera to the printer is in a script form that contains the image data file that the printer refers to for printing; see figs. 1, 2, 5, 10 and 20; paragraphs [0124]-[0165]); and

performing, at the printer, a print operation of an image based on the received image data file (i.e. the printer performs the feature of printing image data once the profiles of the camera and the printer match; see paragraphs [0121]-[0123]),

wherein an extension tag corresponding to the extended function is inserted into the script while remaining an existing tag in the predetermined print control protocol (i.e. when looking at the scripts in example 4, the most important parts of script {8} are in lines 4-6. These lines reflect the type of data being used and the format desired to be used. When looking at script {13}, the same type of information sent in the first script from the camera to the printer is in the last script after the extended function of the intermediate device is used to process the camera's image data. The tag that represents the extended function used on the image data is {13A} that is above the data representing the original data {13B}. This is an example of having the tag representing the extension function inserted into the script while the tag of the predetermined function, or print control protocol, which represents the original data and the printing of that data, is also in the script; see figs. 10 and 20; paragraphs [0124]-[0165]).

However, Smart '691 fails to teach connecting directly a digital camera and a printer via a USB cable and wherein the extended function includes at least one of a PIM function and an Exif printing function.

However, this is well known in the art as evidenced by Kuwata '833. Kuwata '833 discloses connecting directly a digital camera and a printer via a USB cable (i.e. like the system of Smart, the system of Kuwata is involved with the communication of a camera with a printer directly or through a computing device (same field of endeavor).

With both inventions in the same field of endeavor, it would have been obvious to combine the two references. Shown in figure 1 is a digital camera (22) that is directly connected to a printer through a cable CV that is used in wired communication. This cable is a USB cable; see fig. 1; paragraph [0085]).

Therefore, in view of Kuwata '833, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of connecting directly a digital camera and a printer via a USB cable in order to have an image file sent to a printer through a cable and to obtain output control information with the print matching information used in the system (as stated in Kuwata '833 paragraphs [0074] and [0085]).

Re claim 10: The teachings of Smart '691 and Kuwata '833 are disclosed above. Smart '691 discloses the image processing method as set forth in claim 8, wherein the printer performs image processing specified by the extension tag with respect to image data in the received image data file (i.e. the printer, when it receives the code fragment {13}, performs the information processing, which is specified by the extension tag in the script which corresponds to the predetermined function of printing the image data. The printing of the image has occurred because the system confirmed that an extended function was available, or valid, to perform the extension functionality of the printer in order to print the image data in the desired fashion. Once the printer receives the image data file (i.e. somefile.jpg), which represents an image, with the extension tag in

the fragment code {13}, the printer will output the data in that format; see figs. 10 and 20; paragraphs [124]-[165]), and

wherein the printer performs the print operation based on the image data which has been subjected to the image processing (i.e. the printer performs the feature of printing image data once the profiles of the camera and the printer match and the appropriate image processing is performed to the image data to ensure the matching profiles; see paragraphs [0121]-[0141]).

Re claim 17: Smart '691 discloses a direct printing system, comprising:

a digital camera, operable to store an image data file (i.e. the camera, considered as the image supply device, stored images in an internal memory as the information (110); see paragraph [0049]); and

a printer, connected to the digital camera (i.e. the communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2. The communication of the control data to the printer makes the printer perform image processing; see figs. 1, 2 10 and 20; paragraphs [0124]-[0165]),

wherein each of the digital camera and the printer comprises:

a communication controller, operable to communicate, between the digital camera and the printer, a control information item including a script described by a markup language (i.e. the information that is used to control the printer and give the attributes of a user's request is in lines 4,5 and 6 of code fragment {8}. The

communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2 and the code that communicates this information is XML. Since the printer and camera have a means for communicating information in the system, it is understood that this means is analogous to the communication controller and performs the function; see figs. 1, 2 10 and 20; paragraphs [0124]-[0165]); and

a script generator, operable to confirm whether an extended function in a predetermined function is executable in both of the digital camera and the printer, operable to generate the script while inserting an extension tag corresponding to the extended function into the script, in a case where it is confirmed the extended function is executable (i.e. when it is confirmed that an extended function is available for the printer to use, which is performed by the discovery and/or announcement process, to process and output an image, a control information item is generated that includes a script for image processing which is described by XML, which is a markup language. For example, if the camera and the printer realize that an output formation of the camera is able to be performed as the input format of the printer, which the format is considered as the extended feature, then a script {9} is generated and this script includes the feature asked for by the camera. Using example 4, the same situation can occur if the user wants to print in high resolution and the printer has the capability of doing so. In this case, the script {9} would represent a tag communicating to the camera that the printer is capable of printing in high resolution; see figs. 10 and 20; paragraphs [0117]-[0120] and [0124]-[0165]), and

operable to generate the script without inserting an extension tag corresponding to the extended function into the script, in a case where it is confirmed the extended function is not executable (i.e. in the system of Smart, when the camera queries the printer to see if the printer matches the features of the camera and a mismatch takes place, the printer is not used to insert the extended feature inside a developed script and send it to a camera as in script {9}. This is an example of the printer not inserting a tag into a script and sending this to the camera to confirm the extended feature. Instead, the printer sees if any intermediate devices can perform this feature. If a codec is found to perform the feature, the codec is used to perform the extended feature and the result is passed to the printer for printing. This is shown in example 4. In example 5, in paragraph [0142], the computer discovers the printer does not perform all the features it needs and then another script is developed and sent to an intermediate device without the printer inserting any tag in the script since it cannot perform the needed feature for job processing; see paragraphs [0124]-[0165]),

wherein the digital camera is operable to transmit, to the printer, an image data file described in the script (i.e. the information that is used to control the printer and give the attributes of a user's request is in lines 4, 5 and 6 of code fragment {8}. The communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2. Since the system operates using the XML schema in communicating requests, the transmission from the camera to the printer is in a script form that contains the image data file that

the printer refers to for printing; see figs. 1, 2, 5, 10 and 20; paragraphs [0124]-[0165]); and

wherein the printer is operable to perform a print operation of an image based on the received image data file (i.e. the printer performs the feature of printing image data once the profiles of the camera and the printer match; see paragraphs [0121]-[0123]).

However, Smart '691 fails to teach connecting directly a digital camera and a printer via a USB cable.

However, this is well known in the art as evidenced by Kuwata '833. Kuwata '833 discloses connecting directly a digital camera and a printer via a USB cable (i.e. shown in figure 1 is a digital camera (22) that is directly connected to a printer through a cable CV that is used in wired communication. This cable is a USB cable; see fig. 1; paragraph [0085]).

Therefore, in view of Kuwata '833, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of connecting directly a digital camera and a printer via a USB cable in order to have an image file sent to a printer through a cable and to obtain output control information with the print matching information used in the system (as stated in Kuwata '833 paragraphs [0074] and [0085]).

Re claim 18: Smart '691 discloses a printer, adapted to be connected to a digital camera storing an image data file (i.e. the camera is used to record and store visual images as image data information, or a file in a certain format (i.e. JPEG), and the printer is used

to operate a printing function on the transmitted image data; see paragraphs [0041], [0046]), the printer comprising:

a communication controller, operable to communicate a control information item including a script described by a markup language (i.e. the communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2. The communication of the control data to the printer makes the printer perform image processing and the code that communicates this information is XML. Since the printer has a means for communicating information in the system, it is understood that this means is analogous to the communication controller and performs the function; see figs. 1, 2 10 and 20; paragraphs [0124]-[0165]); and

confirm whether an extended function in a predetermined print control protocol is executable in both of the digital camera and the printer (i.e. in the system of Smart '691, the camera (102) desires an output in a format that is different than the format of the printer (104) which accepts the request. The camera has the ability to request a certain function (i.e. format transformation) to occur to image data for a predetermined function (i.e. printing image data) in the system. The system does establish, or confirm, whether an extended function, such as format transformation, for the printing function, which is considered as a predetermined function, is a valid, or executable, request for the camera, considered as the image supply device, and whether the function is actually present, which is also considered as valid or executable, in the printer, which is considered to be the image output device. Illustrated in figure 10, when a suitable

target device is found, it is checked to see if profile compatibility is found between the profile of the camera and the target device. If there is not a profile compatibility, an extension function, which is gained through another device that serves a mediator that performs the extended function for the predetermined function of printing a document, is acquired through the discovery of the other devices on the network and confirms that the device that offers the extended function for the predetermined function of printing, is available for use by the image output device. Both the printer and the camera generate scripts to communicate to one another the status of whether a certain printer is a perfect match in profiles with the camera or whether the camera needs to transfer the image data stored on the camera to a codec for an extended function to occur on the image data in order for the image to be printed. The fragments of code generated and shown in fragments {10}-{13B} are examples of code being generated by both the printer and the camera. Also, when looking at the scripts in example 4, the most important parts of script {8} are in lines 4-6. These lines reflect the type of data being used and the format desired to be used. When looking at script {13}, the same type of information sent in the first script from the camera to the printer is in the last script after the extended function of the intermediate device is used to process the camera's image data. The tag that represents the extended function used on the image data is {13A} that is above the data representing the original data {13B}. This is an example of having the tag representing the extension function inserted into the script while the tag of the predetermined function, which represents the original data and the printing of that data, is also in the script. Since a script is generated every time the camera and printer have

to communicate with other devices, it is understood that a means in the system is used to perform the function of the script generator; see figs. 10 and 20; paragraphs [0124]-[0165])

receive, from the digital camera, an image data file described in the script (i.e. the information that is used to control the printer and give the attributes of a user's request is in lines 4, 5 and 6 of code fragment {8}. The communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2. Since the system operates using the XML schema in communicating requests, the transmission from the camera to the printer is in a script form that contains the image data file that the printer refers to for printing; see figs. 1, 2, 5, 10 and 20; paragraphs [0124]-[0165]); and

perform a print operation of an image based on the received image data file and the extended function (i.e. the printer performs the feature of printing image data once the profiles of the camera and the printer match. The camera ensures that the extended function of transforming the image data into another format occurs before the image data is sent to the printer for printing, so that the image data received at the printer is received through an image file that has been processed by an extension function in the system is finally printed; see paragraphs [0121]-[0141),

wherein an extension tag corresponding to the extended function is inserted into the script in a case where it is confirmed the extended function is executable (i.e. when it is confirmed that an extended function is available for the printer to use, which is performed by the discovery and/or announcement process, to process and output an

image, a control information item is generated that includes a script for image processing which is described by XML, which is a markup language. For example, if the camera and the printer realize that an output formation of the camera is able to be performed as the input format of the printer, which the format is considered as the extended feature, then a script {9} is generated and this script includes the feature asked for by the camera. Using example 4, the same situation can occur if the user wants to print in high resolution and the printer has the capability of doing so. In this case, the script {9} would represent a tag communicating to the camera that the printer is capable of printing in high resolution; see figs. 10 and 20; paragraphs [0117]-[0120] and [0124]-[0165]), and

wherein no extension tag corresponding to the extended function is inserted into the script in a case where it is confirmed the extended function is not executable (i.e. in the system of Smart, when the camera queries the printer to see if the printer matches the features of the camera and a mismatch takes place, the printer is not used to insert the extended feature inside a developed script and send it to a camera as in script {9}. This is an example of the printer not inserting a tag into a script and sending this to the camera to confirm the extended feature. Instead, the printer sees if any intermediate devices can perform this feature. If a codec is found to perform the feature, the codec is used to perform the extended feature and the result is passed to the printer for printing. This is shown in example 4. In example 5, in paragraph [0142], the computer discovers the printer does not perform all the features it needs and then another script is developed and sent to an intermediate device without the printer inserting any tag in the

script since it cannot perform the needed feature for job processing; see paragraphs [0124]-[0165]).

However, Smart '691 fails to teach connecting directly a digital camera and a printer via a USB cable.

However, this is well known in the art as evidenced by Kuwata '833. Kuwata '833 discloses connecting directly a digital camera and a printer via a USB cable (i.e. like the system of Smart, the system of Kuwata is involved with the communication of a camera with a printer directly or through a computing device (same field of endeavor). With both inventions in the same field of endeavor, it would have been obvious to combine the two references. Shown in figure 1 is a digital camera (22) that is directly connected to a printer through a cable CV that is used in wired communication. This cable is a USB cable; see fig. 1; paragraph [0085]).

Therefore, in view of Kuwata '833, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of connecting directly a digital camera and a printer via a USB cable in order to have an image file sent to a printer through a cable and to obtain output control information with the print matching information used in the system (as stated in Kuwata '833 paragraphs [0074] and [0085]).

Re claim 19: Smart '691 discloses a digital camera adapted to be connected to a printer operable to perform a print operation (i.e. the camera is used to record and store visual images as image data information, or a file in a certain format (i.e. JPEG), and the

printer is used to operate a printing function on the transmitted image data; see paragraphs [0041], [0046]), the digital camera comprising:

a storage, storing an image data file (i.e. the camera, considered as the image supply device, stored images in an internal memory as the information (110); see paragraph [0049]);

a communication controller, operable to communicate a control information item including a script described by a markup language (i.e. the communication between the camera and the printer of the control item information is performed through a communications network (1706) shown in figure 2. The communication of the control data to the printer makes the printer perform image processing and the code that communicates this information is XML. Since the camera has a means for communicating information in the system, it is understood that the means is analogous to the communication controller and performs the function; see figs. 1, 2 10 and 20; paragraphs [0124]-[0165]); and

a script generator, operable to confirm whether an extended function in a predetermined print control protocol is executable in both of the digital camera and the printer, operable to generate the script while inserting an extension tag corresponding to the extended function into the script, in a case where it is confirmed the extended function is executable (i.e. when it is confirmed that an extended function is available for the printer to use, which is performed by the discovery and/or announcement process, to process and output an image, a control information item is generated that includes a script for image processing which is described by XML, which is a markup language.

For example, if the camera and the printer realize that an output formation of the camera is able to be performed as the input format of the printer, which the format is considered as the extended feature, then a script {9} is generated and this script includes the feature asked for by the camera. Using example 4, the same situation can occur if the user wants to print in high resolution and the printer has the capability of doing so. In this case, the script {9} would represent a tag communicating to the camera that the printer is capable of printing in high resolution; see figs. 10 and 20; paragraphs [0117]-[0120] and [0124]-[0165]), and

operable to generate the script without inserting an extension tag corresponding to the extended function into the script, in a case where it is confirmed the extended function is not executable (i.e. in the system of Smart, when the camera queries the printer to see if the printer matches the features of the camera and a mismatch takes place, the printer is not used to insert the extended feature inside a developed script and send it to a camera as in script {9}. This is an example of the printer not inserting a tag into a script and sending this to the camera to confirm the extended feature. Instead, the printer sees if any intermediate devices can perform this feature. If a codec is found to perform the feature, the codec is used to perform the extended feature and the result is passed to the printer for printing. This is shown in example 4. In example 5, in paragraph [0142], the computer discovers the printer does not perform all the features it needs and then another script is developed and sent to an intermediate device without the printer inserting any tag in the script since it cannot perform the needed feature for job processing; see paragraphs [0124]-[0165]).

However, Smart ‘691 fails to teach connecting directly a digital camera and a printer via a USB cable.

However, this is well known in the art as evidenced by Kuwata ‘833. Kuwata ‘833 discloses connecting directly a digital camera and a printer via a USB cable (i.e. like the system of Smart, the system of Kuwata is involved with the communication of a camera with a printer directly or through a computing device (same field of endeavor). With both inventions in the same field of endeavor, it would have been obvious to combine the two references. Shown in figure 1 is a digital camera (22) that is directly connected to a printer through a cable CV that is used in wired communication. This cable is a USB cable; see fig. 1; paragraph [0085]).

Therefore, in view of Kuwata ‘833, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of connecting directly a digital camera and a printer via a USB cable in order to have an image file sent to a printer through a cable and to obtain output control information with the print matching information used in the system (as stated in Kuwata ‘833 paragraphs [0074] and [0085]).

Re claim 20: The teachings of Smart ‘691 in view of Kuwata ‘833 are disclosed above. Smart '691 discloses a computer program product comprising a computer-readable storage medium having stored a computer program which causes a computer to execute the direct printing method as set forth in claim 1 (i.e. a computer program

product is used to cause the computers used in the system to perform the features of the claim above; see paragraphs [0039]-[0047]).

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smart '691, as modified by the features of Kuwata '833, as applied to claims 1 and 10 above, and further in view of Okada '699 (USP 6980699).

Re claim 11: The teachings of Smart '691 and Kuwata '833 are disclosed above. Smart '691 discloses the image processing method as set forth in claim 10, wherein the extension tag specifies image processing

However, Smart '691 fails to teach in which another image is combined with an original image of the image data.

However, this is well known in the art as evidenced by Okada '699. Okada '699 discloses in which another image is combined with an original image of the image data (i.e. like the above applied references, the Okada reference involves a camera communicating with a computing device and a printer (same field of invention). However, in the background of the invention, the user is given the ability to choose the frame that will be combined with the photo the user has taken. In the prior art system, the frame is used to be combined with the photo. The frame, considered to be another image, is combined with an original image, considered as the user's photo, of the image data in the system; see col. 1, lines 30-40).

Therefore, in view of Okada '699, it would have been obvious to one of ordinary skill at the time the invention was made to have another image combined with an original image of the image data incorporated in the device of Smart ‘691, as combined with the features of Kuwata ‘833, in order to combine the user’s photo with a selected frame (as stated in Okada '699 col. 1, lines 30-40).

Re claim 12: The teachings of Smart '691, Kuwata ‘833, and Okada '699 are disclosed above.

Smart '691 discloses the image processing method as set forth in claim 11, wherein the another image data (i.e. the extension tag specifies the image data and the tag specifically specifies the image processing that will be performed on the image data specified; see figs. 10 and 20; paragraphs [0124]-[0165]).

However, Smart '691 fails to teach for a frame image.

However, this is well known in the art as evidenced by Okada '699. Okada '699 discloses for a frame image (i.e. in Okada '699 a frame image is specified and selected by the user to be used in combination with an image that is photographed by the user in the system. With the extension tag used in Smart '691 able to specify different image parameters to be performed to the original image in combination with the system of Okada '699 that is able to specify image data for a frame to be combined with an original image, the above feature is met; see col. 1, lines 30-40).

Therefore, in view of Okada '699, it would have been obvious to one of ordinary skill at the time the invention was made to have an extension tag to specify image data

for a frame image incorporated in the device of Smart '691, as combined with the features of Kuwata '833, in order to have a frame selected for combining with a photo (as stated in Okada '699 col. 1, lines 30-40).

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smart '691, as modified by Kuwata '833, as applied to claim 1 above, and further in view of Fukasawa '952 (US Pub No 2002/0140952).

Re claim 27: The teachings of Smart '691 and Kuwata '833 are disclosed above.

However, Smart '691 fails to teach wherein the extended function includes a marginless printing function.

However, this is well known in the art as evidenced by Fukasawa '952. Fukasawa '952 discloses wherein the extended function includes a marginless printing function (i.e. similar to the above applied references, the camera communicates with a computing device and a printing device (same field of invention). However, in the system, some models of printers have special functions such as marginless printing; see paragraph [0075]).

Therefore, in view of Fukasawa '952, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein the extended function includes a marginless printing function in order to have special functions such as marginless printing (as stated in Fukasawa '952 paragraph [0075]).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. The Kuwata reference contains inserting tags into the control information within the script that makes up the Print Matching data and the system detects whether this information is present at the printing device (see paragraphs [0100]-[0105]).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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